# CMS architecture... and CMS Top 5 issues

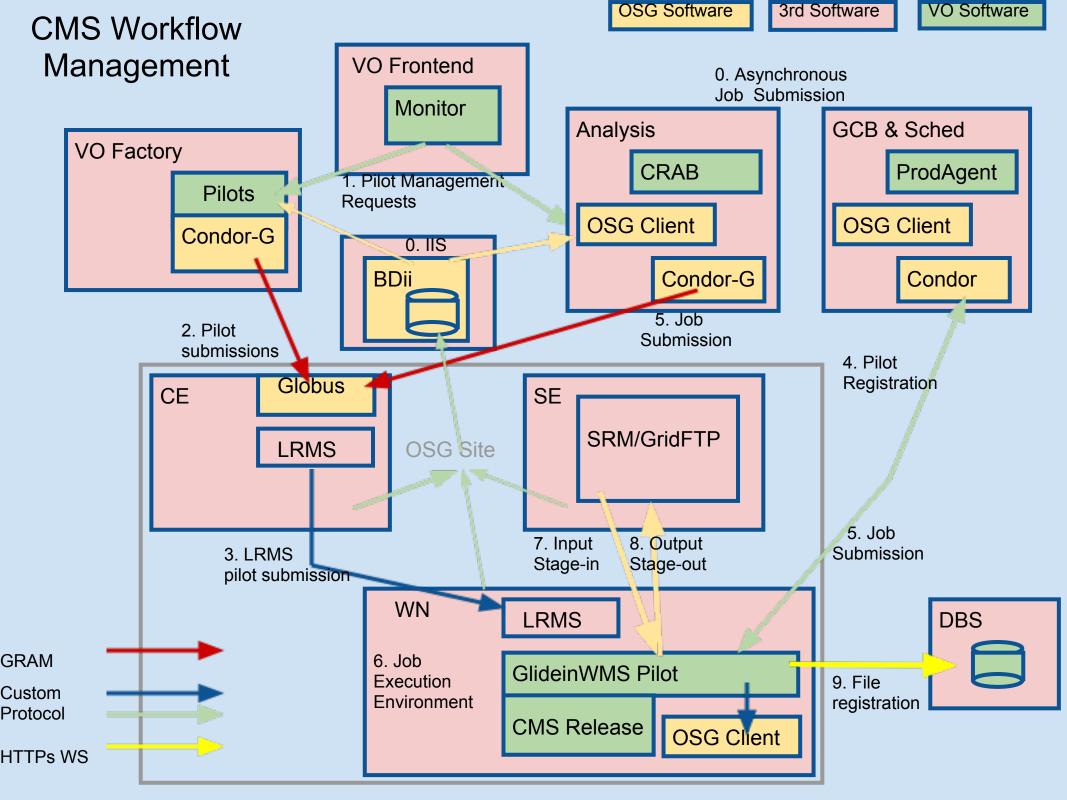
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### **US CMS Tier-1**

- LHC Resources at Fermilab
  - LPC: http://www.uscms.org/uscms\_at\_work/physics/lpc/index.shtml
  - ROC: http://www.uscms.org/roc/
  - CMS Center: http://cms.fnal.gov/index.shtml
- Data and Computing Facilities (CMS Tier-1):

http://www.uscms.org/uscms\_at\_work/data\_computing/index.shtml

Main WebPage: http://www.uscms.org/



#### **CMS** Data Distribution Users' requests Generic **CMS Data Services** Tier 0 Requests DBS **PhEDEx** Status SE Portal DB Sync SRM/GridFTP FTS Generic Status Requests Data Requests **Transfers** OSG T1 Site PhEDEx SE SRM/GridFTP FTS Requests Data **Transfers** OSG T2 Site **PhEDEx** SE **GridFTP** SRM/GridFTP Custom Protocol HTTPs WS **OSG Software** 3rd Software VO Software

## **Technical Issues**

- Condor limitations due to the scale optimized network paths, UDP vs. TCP, race conditions
- CE or SAZ overload during various times (lost connectivity, bulk requests)
- Authentication failures due to GUMS servers

## **Technical Issues - continued**

- dCache partial interoperability with other storage systems (both ways)
- CRL management problems
  - download failures
  - out of service nodes and missing startup update
  - cron job frequency too low